



**REPLACEMENT
SHEET
1/19**

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**STEPS IN
PCR/RE/LDR**

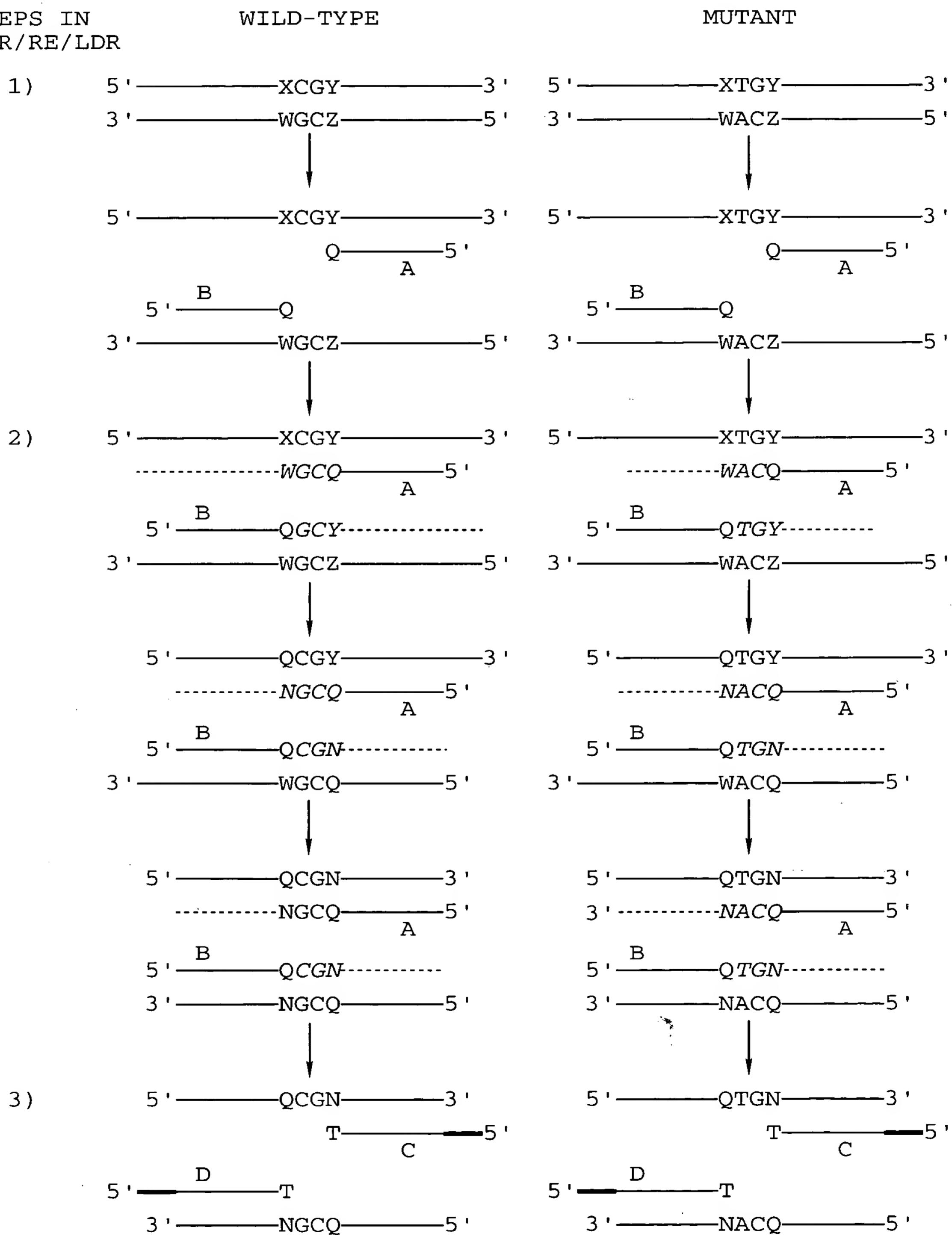


FIG. 1A



**REPLACEMENT
SHEET**
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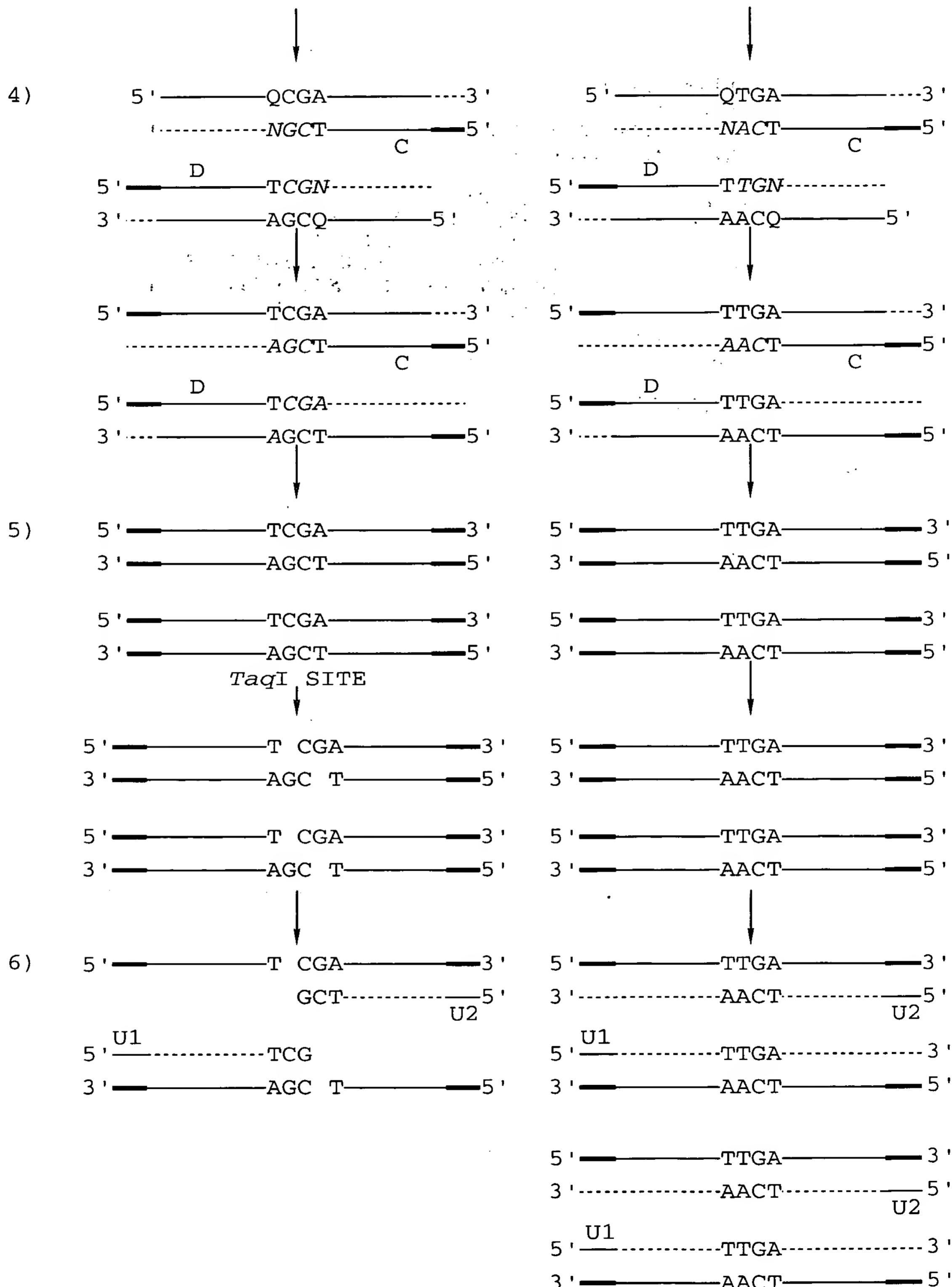


FIG. 1B



REPLACEMENT SHEET

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7A) 5' -----TCGA-----3'

5' AA — T
5' AAAA — G
5' AAAAAA — A
3' — 5' CG — FLUOR
3' -----AGCT-----5'

5' — TTGA — 3'

5' — C
5' AAAA — G
5' AAAAAA — A
3' — 5' AA — TG — FLUOR
3' — AACT — 5'

5' -----CG----- FLUOR
3' -----AGCT-----5'

5' AA — TG — FLUOR
5' AA — TG — FLUOR
3' — 5' AA — TG — FLUOR
3' — AACT — 5'

7B) 5' -----TCGA-----3'

5' ZIP2 — T
5' ZIP3 — G
5' ZIP4 — A
5' ZIP1 — CG — FLUOR
3' -----AGCT-----5'

FROM 6)

5' — TTGA — 3'

5' ZIP1 — C
5' ZIP3 — G
5' ZIP4 — A
5' ZIP2 — TG — FLUOR
3' — AACT — 5'

5' ZIP1 — CG — FLUOR
3' -----AGCT-----5'

5' ZIP2 — TG — FLUOR
5' ZIP2 — TG — FLUOR
5' ZIP2 — TG — FLUOR
3' — AACT — 5'

FIG. 1C



REPLACEMENT SHEET

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5' AA ————— TG ————— FL

5' CG FL

5' AAAAAA ————— A

5' AAAA ————— G

5' G FL

5' AA ————— T

5' C

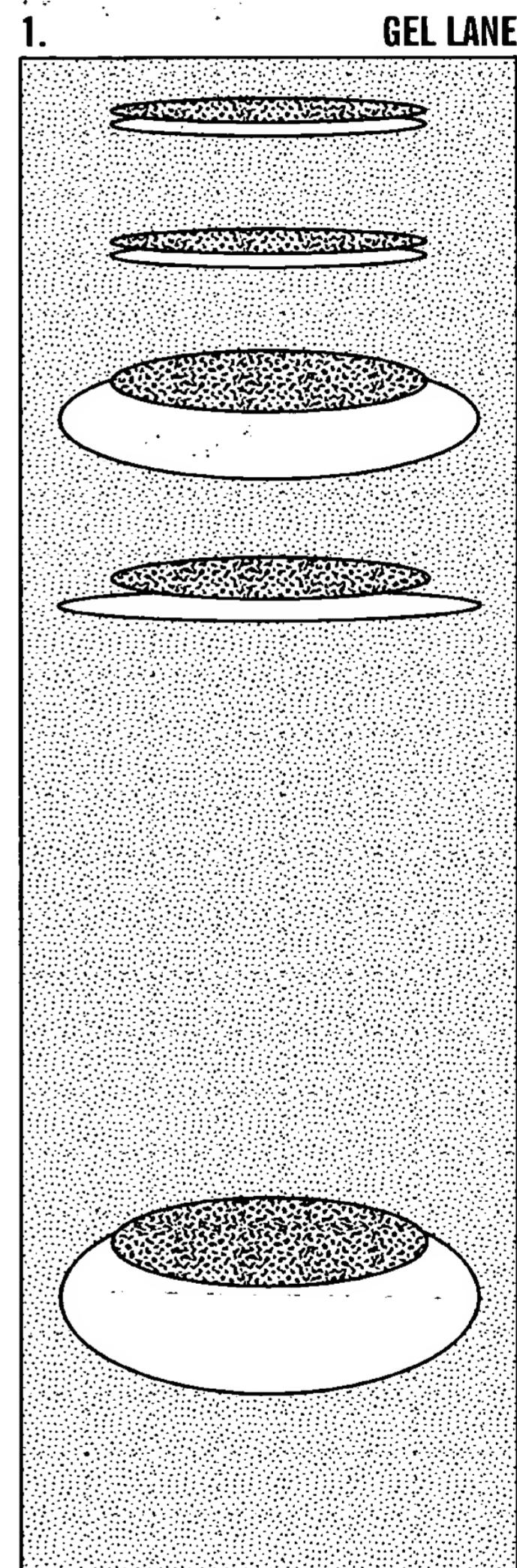


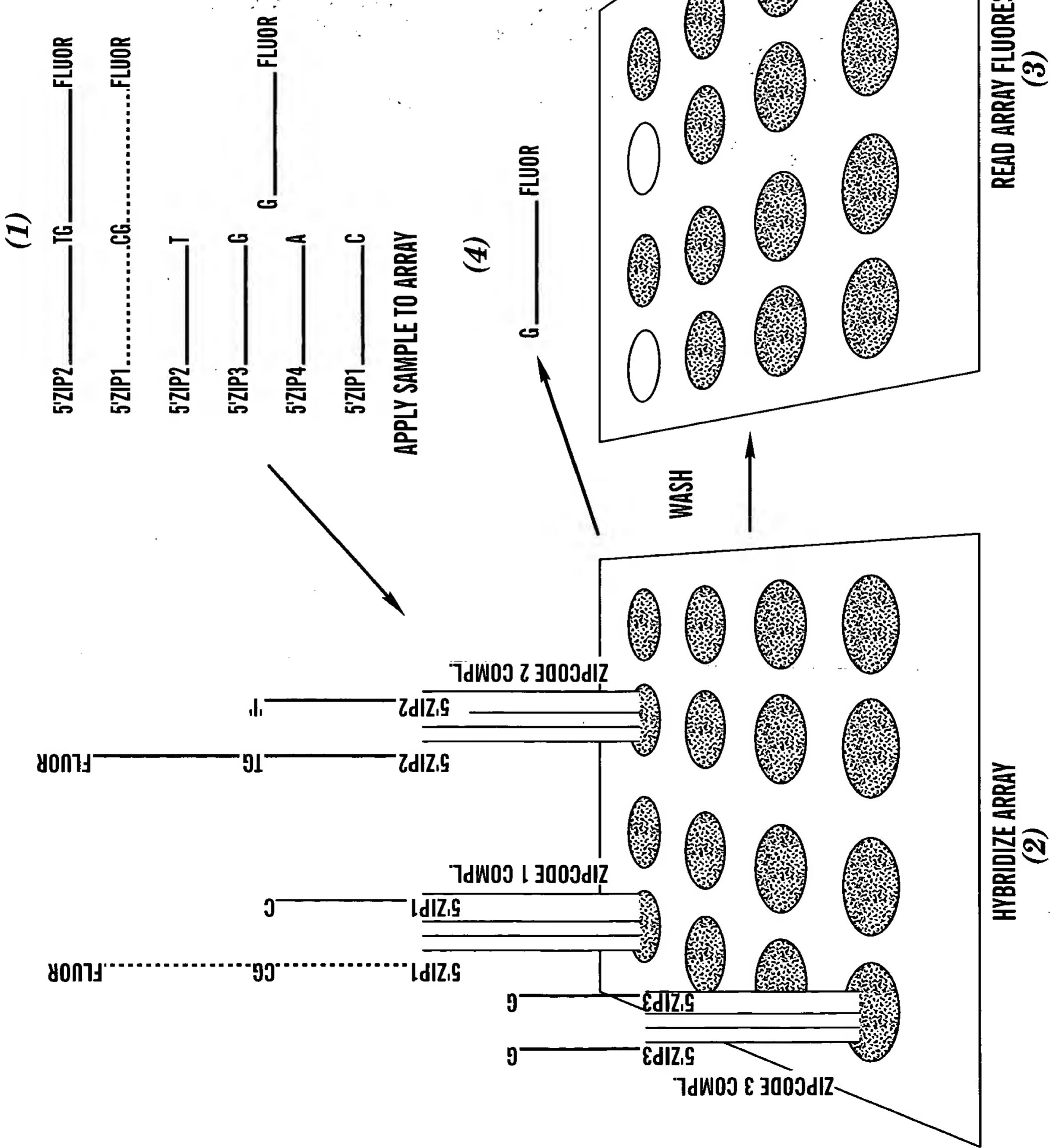
FIG. 2



REPLACEMENT SHEET

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FIG. 3





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REPLACEMENT SHEET

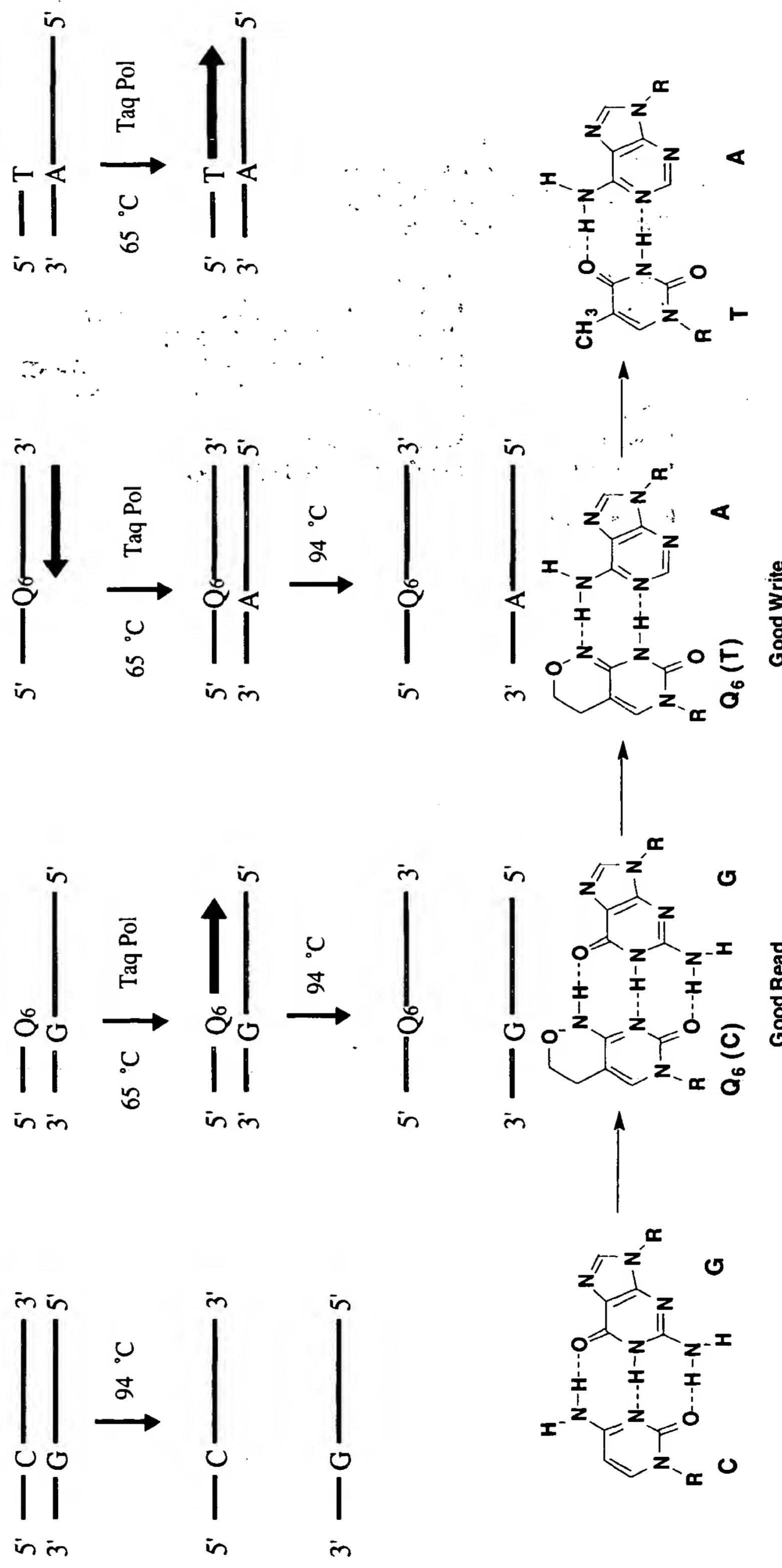
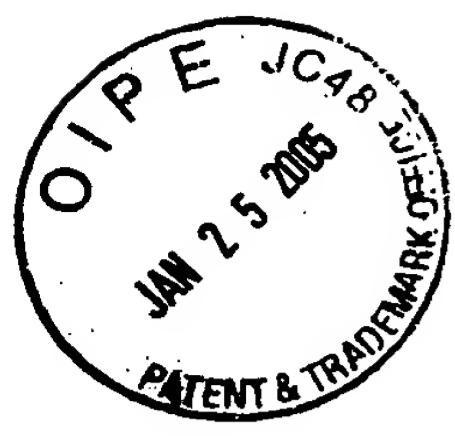
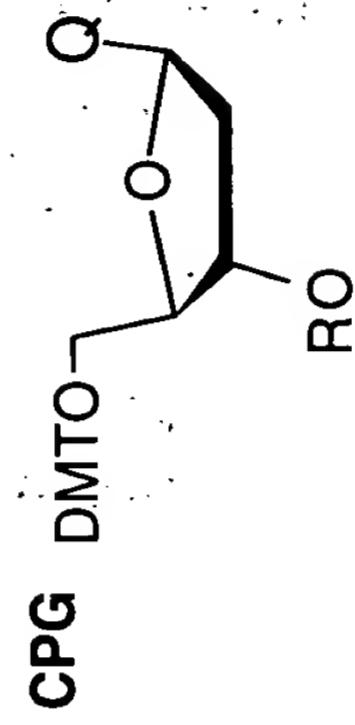
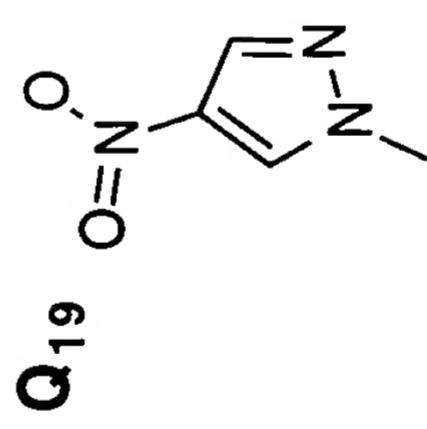
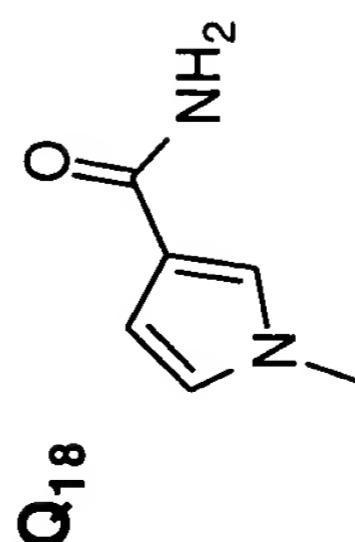
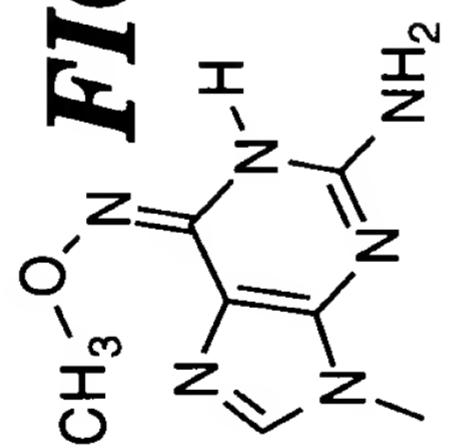
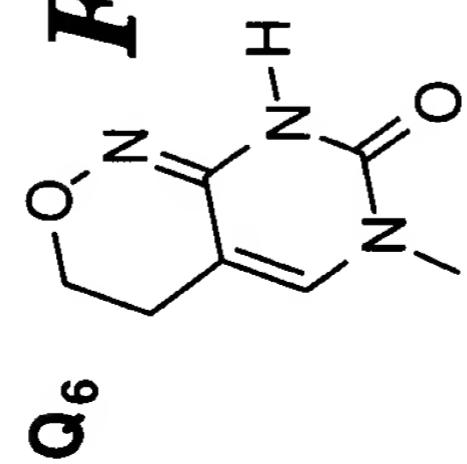
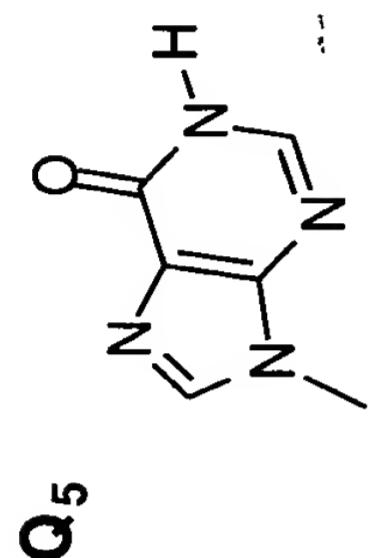
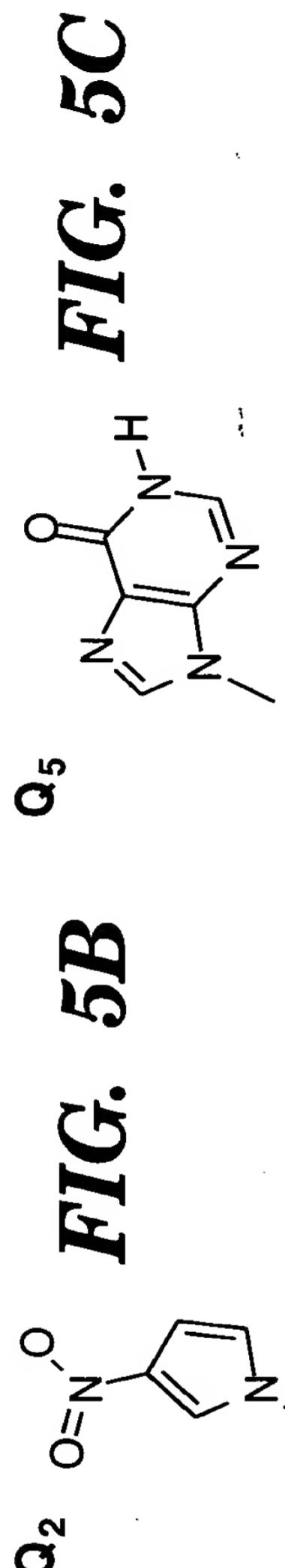
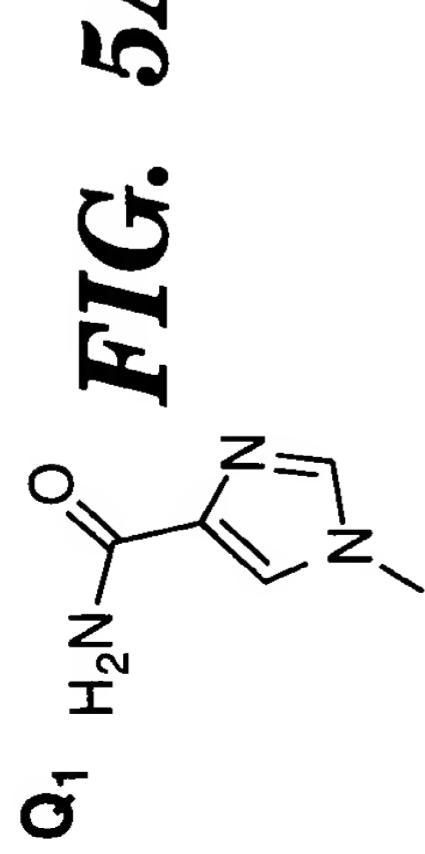


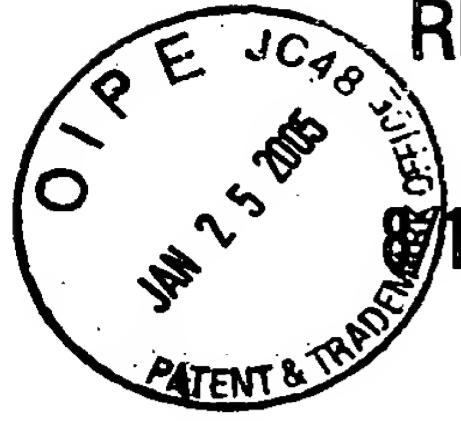
FIG. 4



REPLACEMENT
SHEET

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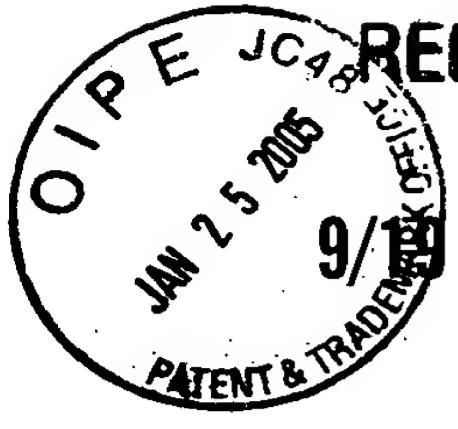


REPLACEMENT SHEET

codon248

PRIMERS

FIG. 6A



REPLACEMENT SHEET

PRIMERS

codon248

CTT GGA CGA GTT CAT ACG C

CC C

四〇〇

卷之三

P53-248QV

卷之三

500 bp synthetic

卷之三

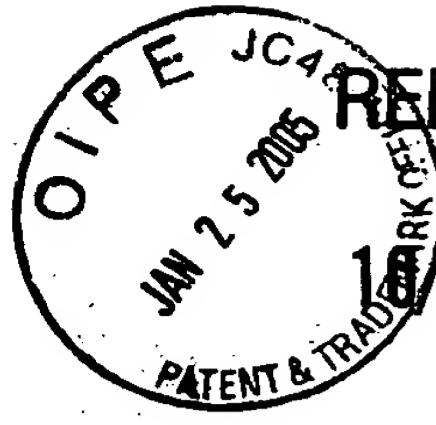
Duplex DNA

Ergonomics in Design 31(1) 11–14

p53-248 Q,R

zzbot

FIG. 6B



REPLACEMENT SHEET

19

LDR PRIMERS

DISCRIMINATION

COMMON

P53LDR248FCA	F-AAAAAA	GC	ATG	GGC	GGC	ATG	AAC	A
P53LDR248FCG	F-AAAAA	GC	ATG	GGC	GGC	ATG	AAC	G
P53LDR248FCT	F-AA	GC	ATG	GGC	GGC	ATG	AAC	T
P53LDR248FCC	F-	GC	ATG	GGC	GGC	ATG	AAC	C-T ... ligase
P53LDR248PGG	3' (- strand)							GG AGG CCC ATC CTC ACC ATC AT-block
CONVERSION	... GTA	TGC	GCA	AGG	ACG	TAC	CCG	TAC TTG NCC TCC GGG TAG GAG TGG TAG TGA ACC...
PRODUCTS								

FIG. 6C



REPLACEMENT SHEET

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Template	CCGG	CTGG	CGGG	CAGG	TCGA	GCGC	ACGT	CATG	CGCG
Expctd prod	<u>CCGG</u>	<u>CTGG</u>	<u>CGGG</u>	<u>CAGG</u>	<u>CCGG</u>	<u>CCGG</u>	<u>CATG</u>	<u>CGCG</u>	
primer 3' end	C Q ₆								
1st base	C C C	C C C	C C C	C C C	C C C	C C C	C C C	C C C	C C C
2nd base	C C T	T G G	A A G	C G C	G G G	G G G	A A A	G G G	
minor 2nd base prod				t	t t	T T	c c c		

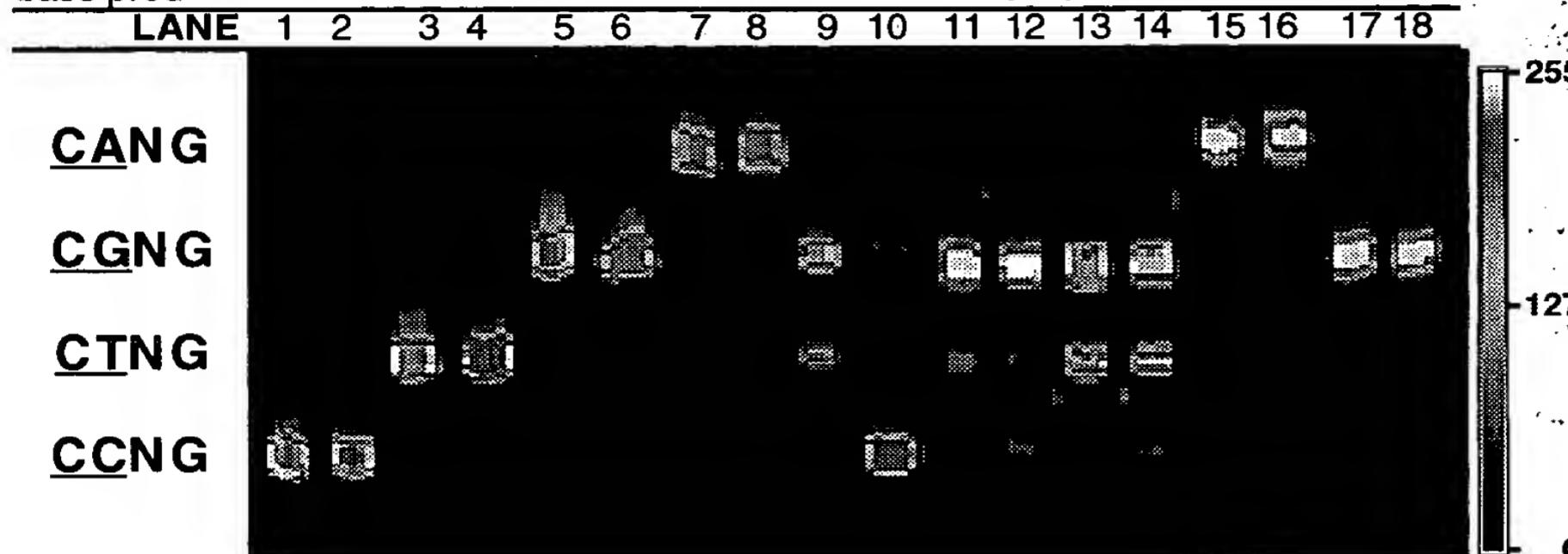


FIG. 7A

Template	CCGG	CTGG	CGGG	CAGG	TCGA	GCGC	ACGT	CATG	CGCG
Expctd prod	<u>TCGA</u>	<u>TTGA</u>	<u>TGGA</u>	<u>TAGA</u>	<u>TCGA</u>	<u>TCGA</u>	<u>TCGA</u>	<u>TATA</u>	<u>TGCA</u>
primer 3' end	T Q ₆								
1st base	T T T	T T T	T T T	T T T	T T T	T T T	T T T	T T T	T T T
2nd base	? C ? T	? G ? A	C C c	C C ? C	? C ? A	? A ? G			
minor 2nd base prod		g			?	c ?	g	g	

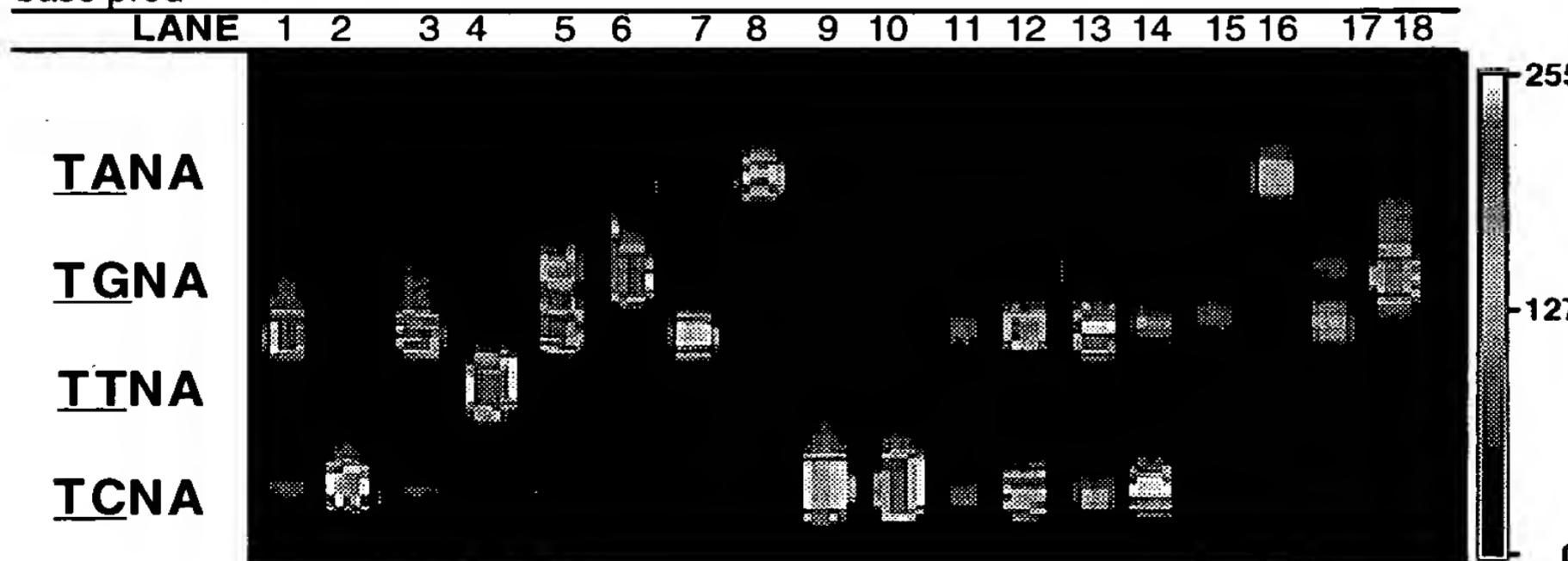


FIG. 7B



**REPLACEMENT
SHEET**
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Template	CCGG	CTGG	CGGG	CAGG	TCGA	GCGC	ACGT	CATG	CGCG
Exptd prod	<u>GC</u> GC	<u>GT</u> GC	<u>GG</u> GC	<u>GAG</u> C	<u>GC</u> GC	<u>GC</u> GC	<u>GC</u> GC	<u>GAT</u> C	<u>GG</u> CC
primer 3' end	G Q ₅ Q ₇								
1st base	G G G	G G G	G G G	G G G	G G G	G G G	G G G	G G G	G G G
2nd base	C C C	C C C	C C C	C C C	C C C	C C C	C C C	C C C	?
minor 2nd base prod	t t t	g g	A A a						

LANE 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27

GANC

GGNC

GTNC

GCNC

255
127
0

FIG. 8A

Template	CCGG	CTGG	CGGG	CAGG	TCGA	GCGC	ACGT	CATG	CGCG
Exptd prod	<u>AC</u> GT	<u>AT</u> GT	<u>AG</u> GT	<u>AAG</u> T	<u>AC</u> GT	<u>AC</u> GT	<u>AC</u> GT	<u>AA</u> TT	<u>AG</u> CT
primer 3' end	A Q ₇ Q ₅								
1st base	A A A	A A A	A A A	A A A	A A A	A A A	A A A	A A A	A A A
2nd base	C C C	C C C	C C C	C C C	C C C	C C C	C C C	C C C	c C c
minor 2nd base prod	?	?							

LANE 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27

AANT

AGNT

ATNT

ACNT

255
127
0

FIG. 8B



REPLACEMENT
SHEET
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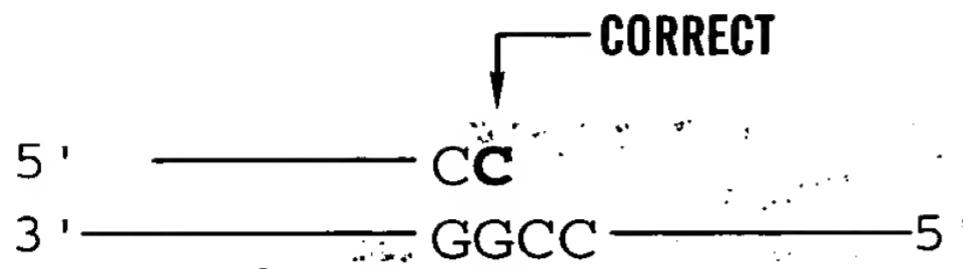


FIG. 9A

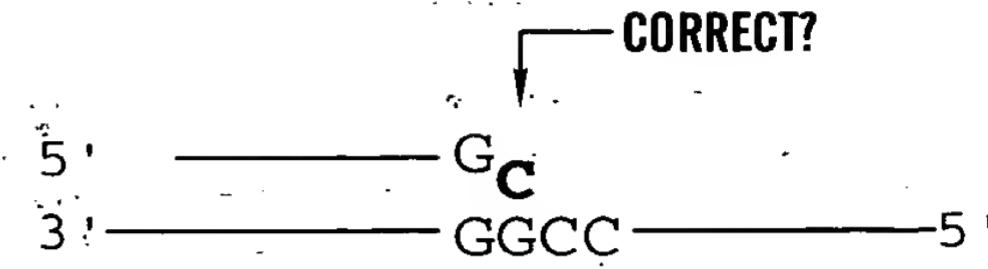


FIG. 9E

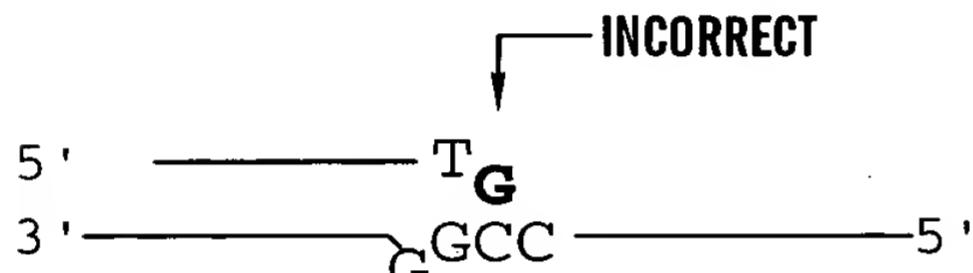


FIG. 9B

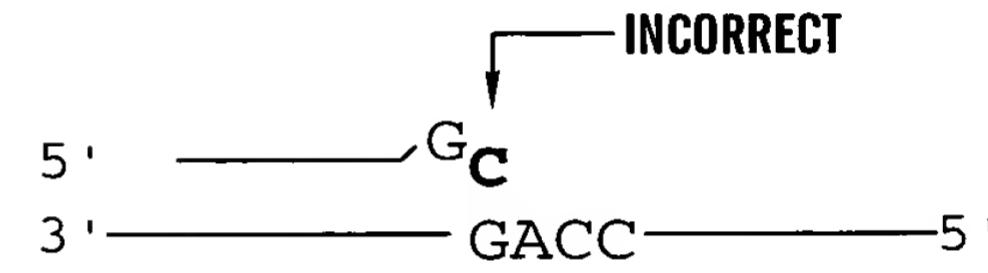


FIG. 9F

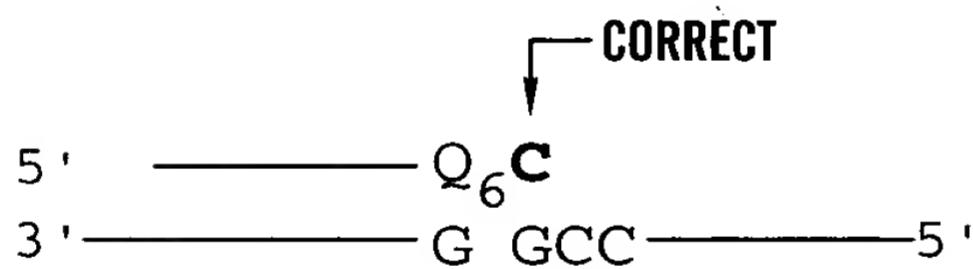


FIG. 9C

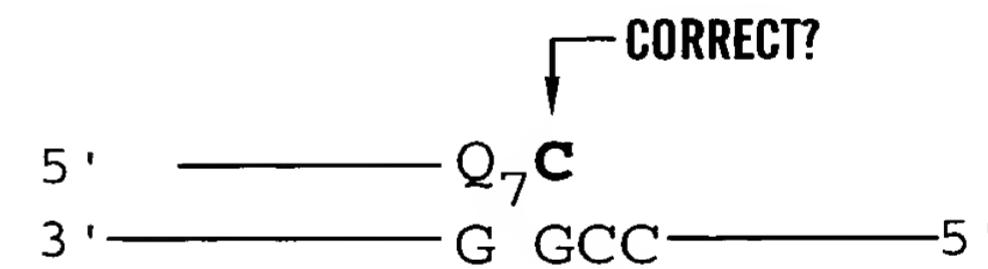


FIG. 9G

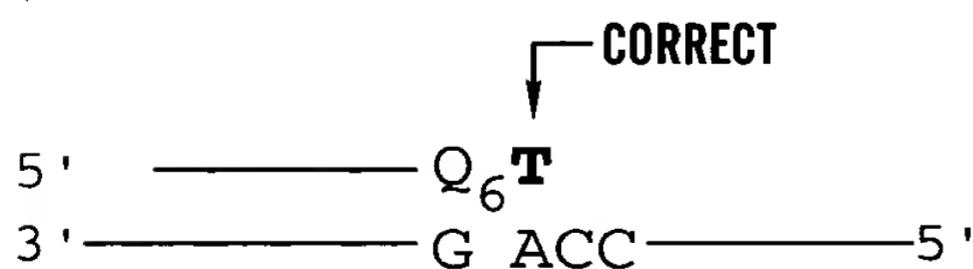


FIG. 9D

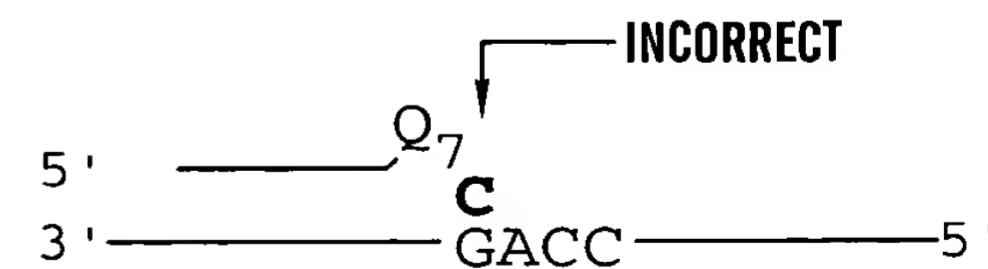


FIG. 9H



REPLACEMENT SHEET

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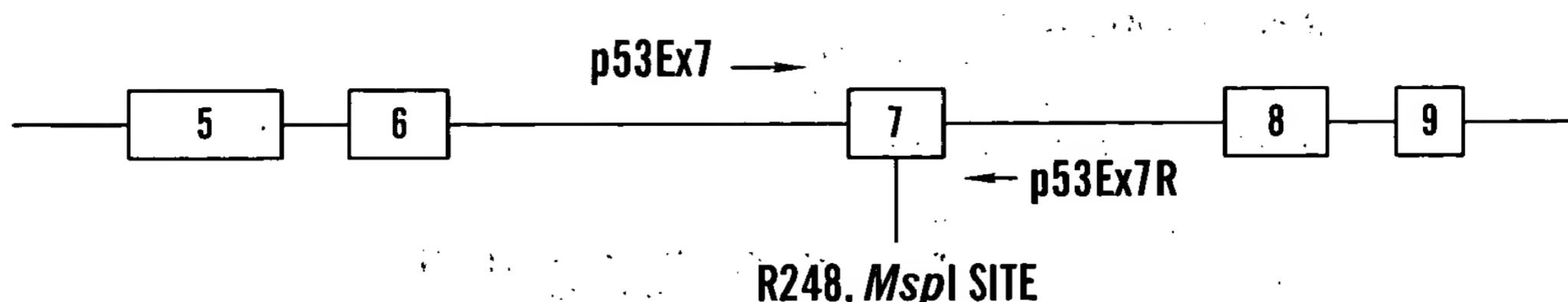


FIG. 10A

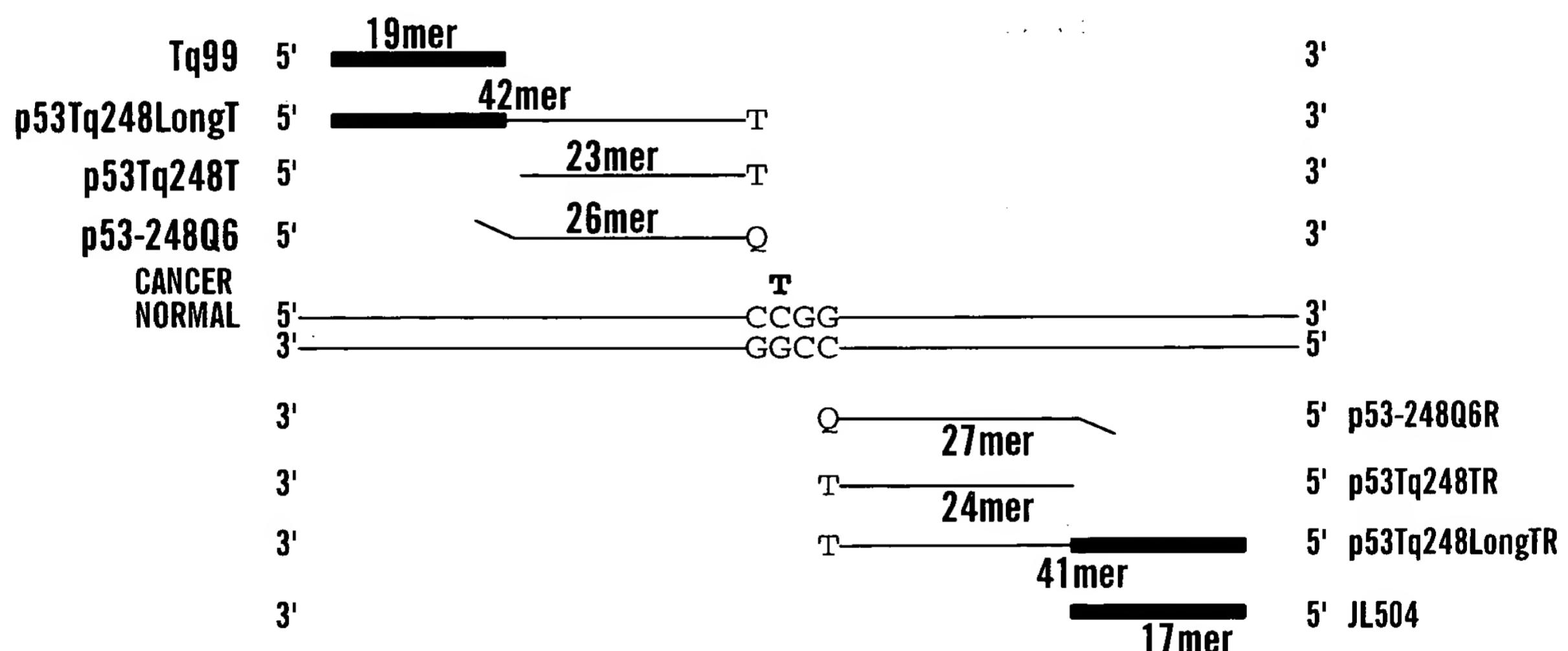
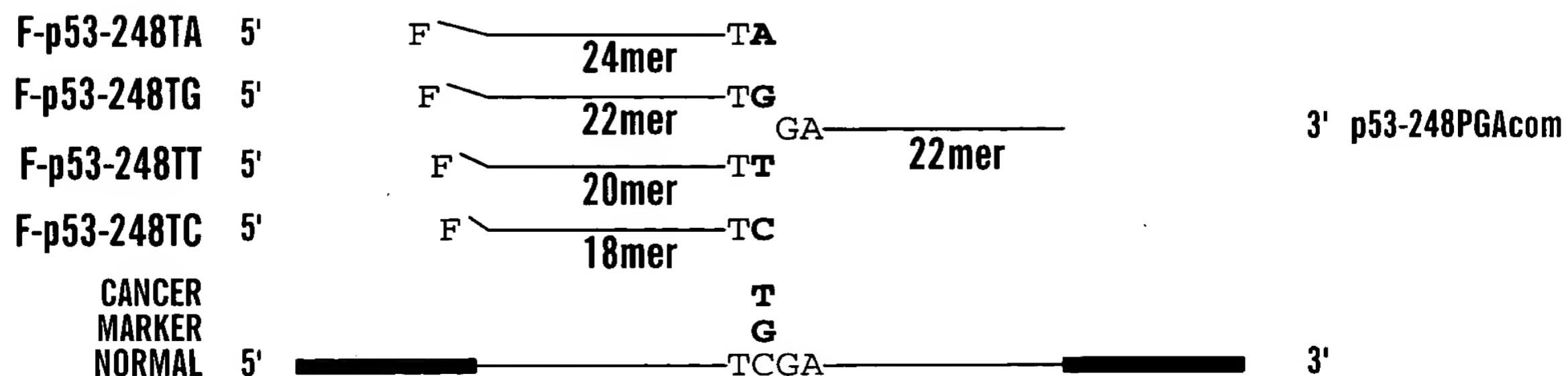


FIG. 10B



CODON 248 CONVERTED TO A *TaqI* SITE

FIG. 10C



REPLACEMENT SHEET

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PRIMERES

MspI (CCGG)
codon 248

center top

ATG GCA GAA GTT CAT ACC CGT TCC TGC ATG GCG GTC ATG GAG C

GT TCC TGC ATC GCG CGC A → no

p53 exon 7

PCR product
(MK not shown)

053-248shortR

2053zip248shortR

77 hot

C ACC GCT GGG TCA AAC G

FIG. 11A

REPLACEMENT SHEET

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PRIMERS

MspI (CCGG)
codon 248

FIG. 11B

REPLACEMENT SHEET

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LDR PRIMERS

DISCRIMINATION

COMMON

P53LDR248FTCL	F-AAAAAAA	GC	ATG	GGC	GGC	ATG	AAT <u>C</u>
P53LDR248FCA	F-AAAAAA	GC	ATG	GGC	GGC	ATG	AAC <u>A</u>
P53LDR248FCG	F-AAAAA	GC	ATG	GGC	GGC	ATG	AAC <u>G</u>
P53LDR248FCT	F-AA	GC	ATG	GGC	GGC	ATG	AAC <u>T</u>
P53LDR248FCC	F-	GC	ATG	GGC	GGC	ATG	AAC <u>C</u>
							↓ ...ligase
P53LDR248PGG							GG AGG CCC ATC CTC ACC ATC AT - block
	3'	{- strand)					
CONVERSION	...GTA	TGC	GCA	AGG	ACG	TAC	CCG TAC TTG NGG TCC GGG TAG GAG TGG TAG TAG TGA ACC . . .
PRODUCTS							

FIG. 11C



REPLACEMENT SHEET

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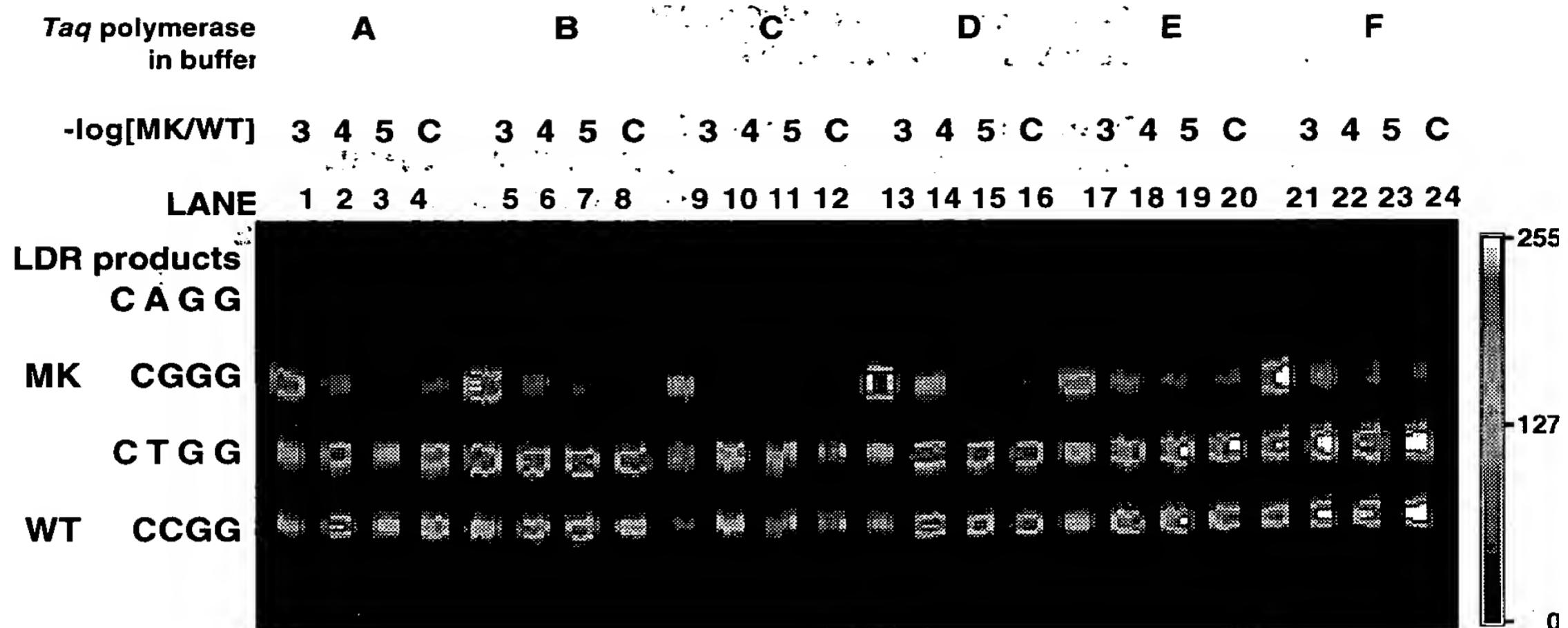


FIG. 12A

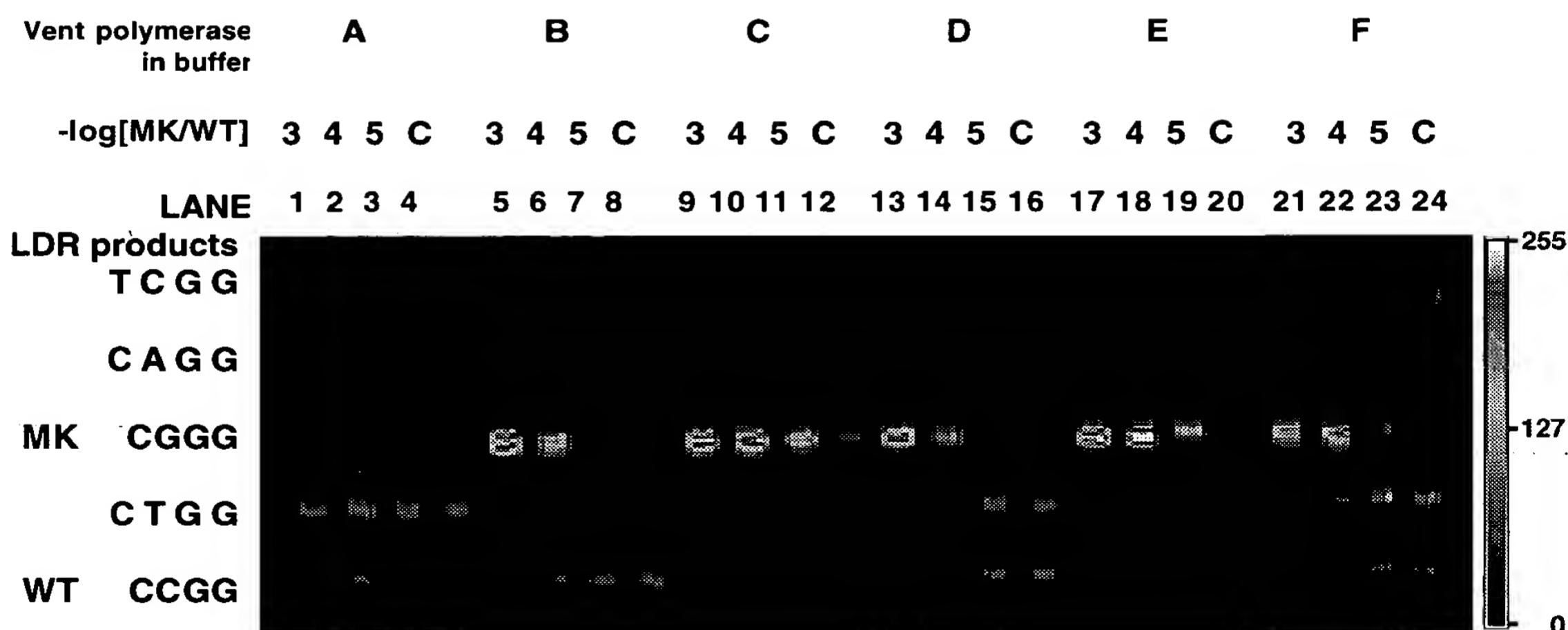
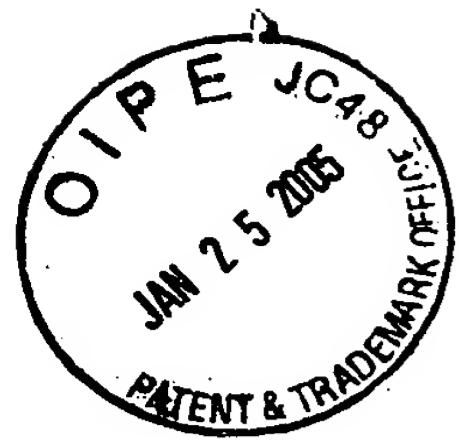


FIG. 12B



REPLACEMENT SHEET

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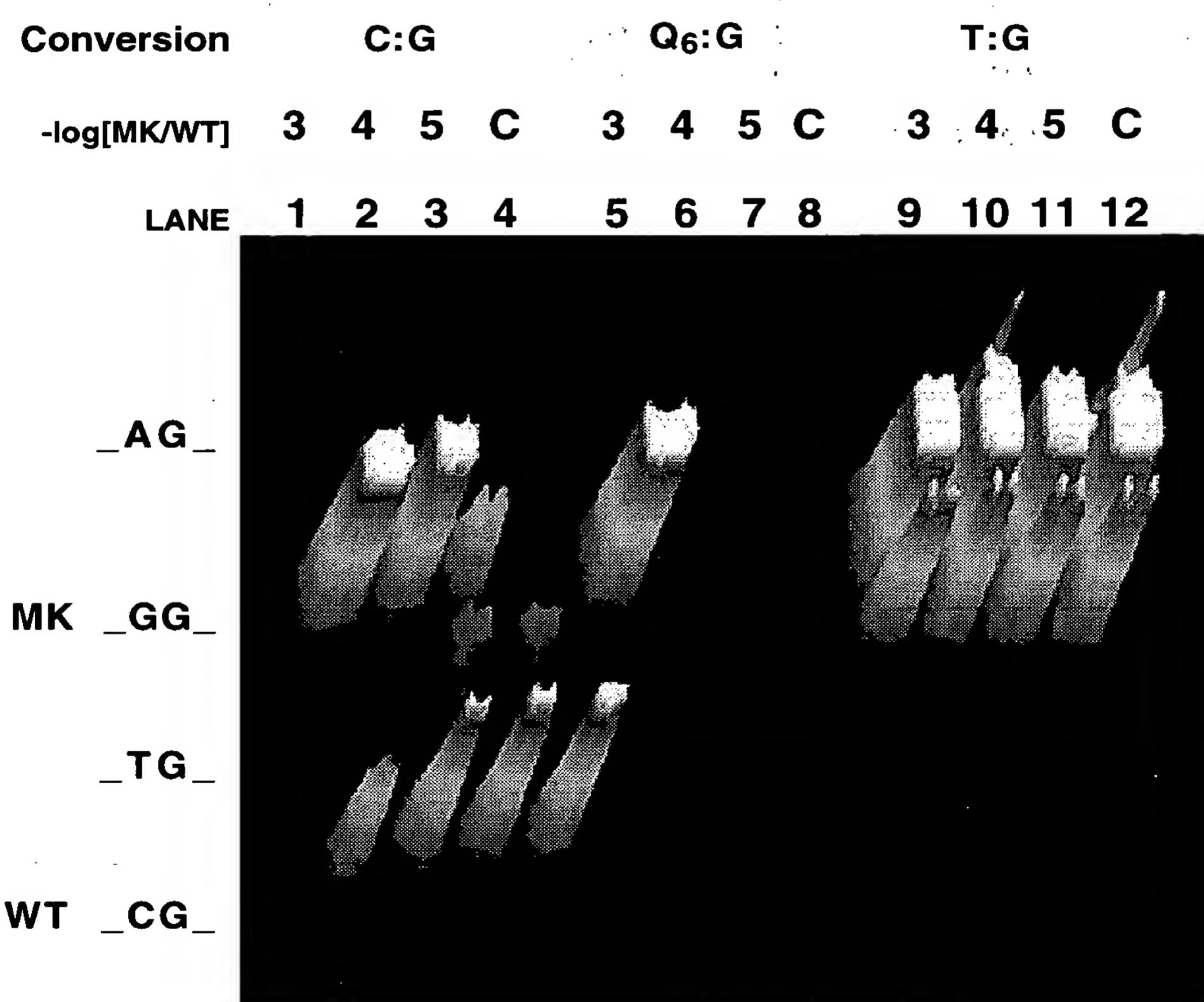


FIG. 13

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